

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Pat Int and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Bh. 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,893	08/02/2001	David Mark Pierce	5150-57700	9833
35690 7590 03/29/2007 MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. 700 LAVACA, SUITE 800			EXAMINER	
			BATES, KEVIN T	
AUSTIN, TX 78°	701		ART UNIT	PAPER NUMBER
			2155	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		03/29/2007	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)				
	09/920,893	PIERCE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Kevin Bates	2155				
The MAILING DATE of this communication app Period for Reply		<u> </u>				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tin  rill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status	•					
1) Responsive to communication(s) filed on 2-20-	07.					
·— ·	action is non-final.					
,	· · · · · · · · · · · · · · · · · · ·					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-3 and 5-16 is/are pending in the application.						
4a) Of the above claim(s) <u>24-31</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3 and 5-16</u> is/are rejected.	•					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)  Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal I					
Paper No(s)/Mail Date 6) Other:						

1

Application/Control Number: 09/920,893

Art Unit: 2155

### Response to Amendment

Page 2

This Office Action is in response to a communication received on February 20, 2007.

Claims 24-31 have been withdrawn from consideration.

Claim 1 has been amended.

Claims 1-3 and 5-16 are currently pending in this application.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerrigan (5404488) in view of Tacklind (5626114).

Regarding claim 1, Kerrigan teaches a method of logging and trending measurement data (Abstract), the method comprising:

a logger application executing on a first computer system receiving a measurement stream comprising a plurality of real time data values (Column 1, lines 44 – 48, where the logger application is the real time engine which interfaces with the data feeds, which are measurement streams),;

the logger application writing portions of the plurality of real time measurement data values to respective shared memory sections of a memory (Column 1, lines 49 –

Art Unit: 2155

52, where the data values are stored/cached into memory) in the first computer system in a modular fashion (Figure 7, element 2016, where the system uses data structures to store the information obtained from the data feeds):

wherein each of the portions of the plurality of real time data values in each of the respective shared memory sections is independently accessible by a trender application (Column 1, lines 52 – 55, where the trender application is the application that is getting the feed updates by the real time engine).

the trender application generating a query request for a first portion of the plurality of real time measurement data values (Column 26, lines 32 – 38);

the first computer system sending a single message to the second computer system, wherein the single message comprises the first portion of the plurality of real time measurement data values (Column 1, lines 62 – 67, where the logger checks which data values have changed and only sends the recently updated values together to the trending application);

the trender application receiving the single message comprising the first portion of the plurality of real time measurement data values;

the trender application displaying the first portion of the plurality of real time measurement data values (Column 5, lines 22 – 24).

Kerrigan does not explicitly indicate that the trender application is executing in a second computer system and wherein the plurality of real time measurement data values are acquired from a physical system by a measurement device, with two or more values are sent to the trender application in a single message.

Art Unit: 2155

Tacklind teaches a system which measures real-time values using a measurement device (Column 5, lines 27 - 37), and sends two or more of those values in a single message (Column 7, lines 21 - 30; Column 6, lines 49 - 53) to a trender application located remotely to the logger application (Column 5, lines 55 - 59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tacklind's teaching of a remote, real-time measuring station from the trender application so that measuring device can be located where the measurements must be taken, while the trender application only needs to be connected on any network.

Regarding claim 2, Kerrigan teaches the method of claim 1, wherein each of the portions of the plurality of real time measurement data values in each of the respective shared memory sections is independently accessible by a trender application executing in a second computer system using a single network message (Column 1, lines 62 – 67, where the logger checks which data values have changed and only sends the recently updated values together to the trending application).

Regarding claim 3, Kerrigan teaches the method of claim 1, wherein each of the portions of the plurality of real time measurement data values in each of the respective shared memory sections independently and accurately represents a subset of the measurement stream (Column 1, lines 56 – 60).

Regarding claim 5, Kerrigan teaches the method of claim 4, wherein the single message is a delta page (Column 1, lines 63 – 67, where sending the delta page means

Art Unit: 2155

sending only the information to the application that has been changed since the last time the application has been updated).

Regarding claim 6, Kerrigan teaches the method of claim 4, wherein the logger application receives the measurement stream and writes the portions of the plurality of real time measurement data values to respective shared memory sections of the memory at a first data rate;

wherein the trender application generates the query request for the first portion of the plurality of real time measurement data values at a second data rate, wherein the second data rate is less than the first data rate (Column 5, line 66 – Column 6, line 3, where the first application runs at a higher priority rate thus having priority and higher speeds than the second rate).

Regarding claim 7, Kerrigan teaches the method of claim 6, wherein the first computer system sending a single message to the trender application comprises:

a first observer software program executing on the first computer system querying the memory for a most recent portion of data at the second data rate (Column 5, line 66 – Column 6, line 3, where the first application runs at a higher priority rate thus having priority and higher speeds than the second rate); and

the first observer software program sending the most recent portion of data to the trender application at the second data rate after said querying the memory (Column 1, lines 52 – 55);

wherein the trender application receiving the single message comprises:

Art Unit: 2155

a second observer software program with the trender application receiving the most recent portion of data at the second data rate from the first observer software program (Column 1, lines 63 – 67); and

the second observer software program writing the most recent portion of data to a memory location (Column 5, lines 22 – 24, where the application takes the data values and uses a spread sheet to store and analyze the data).

Kerrigan does not explicitly indicate that the trender application is executing in a second computer system.

Tacklind teaches a system which measures real-time values using a measurement device (Column 5, lines 27 - 37), and sends two or more of those values in a single message (Column 7, lines 21 - 30; Column 6, lines 49 - 53) to a trender application located remotely to the logger application (Column 5, lines 55 - 59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tacklind's teaching of a remote, real-time measuring station from the trender application so that measuring device can be located where the measurements must be taken, while the trender application only needs to be connected on any network.

Regarding claim 8, Kerrigan teaches the method of claim 7, wherein the memory location is a database (Column 6, lines 63 – 66).

Regarding claim 9, Kerrigan teaches the method of claim 1, wherein the trender application is operable to partially replicate the plurality of real time measurement data values comprising the measurement stream (Column 5, lines 22 – 24, where the

Art Unit: 2155

application takes the data values and uses a spread sheet to store and analyze the data).

Regarding claim 10, Kerrigan teaches the method of claim 1, wherein the logger application writing portions of the plurality of real time measurement data values to respective shared memory sections of a memory in the first computer system in a modular fashion comprises: creating a header record comprising a series of bits, wherein the bits in the header record indicate a changed status of the respective shared memory sections; the logger application writing the header record in the shared memory (Column 6, lines 9-23).

Regarding claim 11, Kerrigan teaches a method of logging and trending <u>real</u> <u>time</u> measurement data, the method comprising:

a logger application executing on a first computer system writing a first plurality of real time measurement data values (Column 1, lines 44 – 48, where the logger application is the real time engine which interfaces with the data feeds, which are measurement streams) to a first shared memory section in the first computer system during a first time period (Column 1, lines 49 – 52, where the data values are stored/cached into memory);

initiating a trender application;

the trender application executing generating a query request for the first plurality of real time measurement data values and sending the query request to the first computer system (Column 26, lines 32 – 38);

the first computer system sending a single message to the second computer system, wherein the single message comprises the first plurality of real time measurement data values (Column 1, lines 62 – 67, where the logger checks which data values have changed and only sends the recently updated values together to the trending application).

Kerrigan does not explicitly indicate that the trender application is executing in a second computer system and wherein the plurality of real time measurement data values are acquired from a physical system by a measurement device.

Tacklind teaches a system which measures real-time values using a measurement device (Column 5, lines 27 - 37), and sends two or more of those values in a single message (Column 7, lines 21 - 30; Column 6, lines 49 - 53) to a trender application located remotely to the logger application (Column 5, lines 55 - 59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tacklind's teaching of a remote, real-time measuring station from the trender application so that measuring device can be located where the measurements must be taken, while the trender application only needs to be connected on any network.

Regarding claim 12, Kerrigan teaches the method of claim 11, further comprising: performing a single write operation in the second computer system to store the first plurality of real time measurement data values in a memory of the second computer system (Column 5, lines 22 – 24, where the application takes the data values and uses a spread sheet to store and analyze the data).

Art Unit: 2155

Regarding claim 13, Kerrigan teaches the method of claim 12, wherein said performing a single write operation comprises:

updating a local cache in a memory of the second computer system with the first plurality of real time measurement data values using a single write operation (Column 1, lines 63 – 66).

Regarding claim 14, Kerrigan teaches the method of claim 12, further comprising: the trender application reading the first plurality of real time measurement data values from the memory of the second computer system after said performing a single write operation in the second computer system to store the first plurality of real time measurement data values in a memory of the second computer system (Column 5, lines 22 – 24, where the application takes the data values and uses a spread sheet to store and analyze the data).

Regarding claim 15, Kerrigan teaches the method of claim 12, wherein the first computer system sending a single message to the trender application comprises the first computer system sending a single network message to the trender application.

Kerrigan does not explicitly indicate that the trender application is executing in a second computer system.

Tacklind teaches a system which measures real-time values using a measurement device (Column 5, lines 27 – 37), and sends two or more of those values in a single message (Column 7, lines 21 – 30; Column 6, lines 49 – 53) to a trender application located remotely to the logger application (Column 5, lines 55 – 59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tacklind's teaching of a remote, real-time measuring station from the trender application so that measuring device can be located where the measurements must be taken, while the trender application only needs to be connected on any network.

Regarding claim 16, Kerrigan teaches the method of claim 12, further comprising: the logger application executing on the first computer system writing second and subsequent pluralities of real time measurement data values to second and subsequent shared memory sections in the first computer system during second and subsequent time periods; wherein the first, second and subsequent pluralities of data values affect only what is written to their respective first, second and subsequent shared memory sections (Column 1, line 67 – Column 2, line 9).

#### Response to Arguments

Applicant's arguments with respect to claims 1 and 11 has been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

Art Unit: 2155

Page 11

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB

KB March 21, 2007

SUPERVISORY PATENT EXAMINER